# 10/543003 JC14 Rec'd PCT/PTO 22 JUL 2005

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Ser	Gly	Arg	Cys 660	Val	Leu	Gly	Ser	Arg 665	Arg	Cys	Asp	Gly	Gln 670	Ala	Asp

Cys Asp Asp Ser Asp Glu Glu Asn Cys Gly Cys Lys Glu Arg Ala

680

675

685

Leu	Trp	Glu	Cys	Pro	Phe	Asn	Lys	Gln	Cys	Leu	Lys	His	Thr	Leu	Ile
	690					695					700				

Cys Asp Gly Phe Pro Asp Cys Pro Asp Ser Met Asp Glu Lys Asn Cys
705 710 715 720

Ser Phe Cys Gln Asp Asn Glu Leu Glu Cys Ala Asn His Glu Cys Val
725 730 735

Pro Arg Asp Leu Trp Cys Asp Gly Trp Val Asp Cys Ser Asp Ser Ser
740 745 750

Asp Glu Trp Gly Cys Val Thr Leu Ser Lys Asn Gly Asn Ser Ser Ser 755 760 765

Leu Leu Thr Val His Lys Ser Ala Lys Glu His His Val Cys Ala Asp
770 775 780

Gly Trp Arg Glu Thr Leu Ser Gln Leu Ala Cys Lys Gln Met Gly Leu
785 790 795 800

Gly Glu Pro Ser Val Thr Lys Leu Ile Pro Gly Gln Glu Gly Gln Gln
805
810
815

Trp Leu Arg Leu Tyr Pro Asn Trp Glu Asn Leu Asn Gly Ser Thr Leu

820 825 830

Gln Glu Leu Leu Val Tyr Arg His Ser Cys Pro Ser Arg Ser Glu Ile 835 840 845

Ser Leu Leu Cys Ser Lys Gln Asp Cys Gly Arg Arg Pro Ala Ala Arg 850 855 860

Met Asn Lys Arg Ile Leu Gly Gly Arg Thr Ser Arg Pro Gly Arg Trp 865 870 875 880

Pro Trp Gln Cys Ser Leu Gln Ser Glu Pro Ser Gly His Ile Cys Gly
885 890 895

Cys Val Leu Ile Ala Lys Lys Trp Val Leu Thr Val Ala His Cys Phe
900 905 910

Glu Gly Arg Glu Asp Ala Asp Val Trp Lys Val Val Phe Gly Ile Asn 915 920 925

Asn Leu Asp His Pro Ser Gly Phe Met Gln Thr Arg Phe Val Lys Thr
930 935 940

Ile Leu Leu His Pro Arg Tyr Ser Arg Ala Val Val Asp Tyr Asp Ile 945 950 955 960

Ser Val Val Glu Leu Ser Asp Asp Ile Asn Glu Thr Ser Tyr Val Arg

- Pro Val Cys Leu Pro Ser Pro Glu Glu Tyr Leu Glu Pro Asp Thr Tyr
  980 985 990
- Cys Tyr Ile Thr Gly Trp Gly His Met Gly Asn Lys Met Pro Phe Lys
  995 1000 1005
- Leu Gln Glu Gly Glu Val Arg Ile Ile Pro Leu Glu Gln Cys Gln
  1010 1015 1020
- Ser Tyr Phe Asp Met Lys Thr Ile Thr Asn Arg Met Ile Cys Ala 1025 1030 1035
- Gly Tyr Glu Ser Gly Thr Val Asp Ser Cys Met Gly Asp Ser Gly
  1040 1045 1050
- Gly Pro Leu Val Cys Glu Arg Pro Gly Gly Gln Trp Thr Leu Phe
  1055 1060 1065
- Gly Leu Thr Ser Trp Gly Ser Val Cys Phe Ser Lys Val Leu Gly
  1070 1075 1080
- Pro Gly Val Tyr Ser Asn Val Ser Tyr Phe Val Gly Trp Ile Glu
  1085 1090 1095

Arg Gln Ile Tyr Ile Gln Thr Phe Leu Gln Lys Lys Ser Gln Gly
1100 1105 1110

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<213> Homo sapiens

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Met Lys Gln Ser Pro Ala Leu Ala Pro Glu Glu Arg Tyr Arg Arg Ala

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Gly Ser Pro Lys Pro Val Leu Arg Ala Asp Asp Asn Asn Met Gly Asn
20 25 30

Gly Cys Ser Gln Lys Leu Ala Thr Ala Asn Leu Leu Arg Phe Leu Leu
35 40 45

Leu Val Leu Ile Pro Cys Ile Cys Ala Leu Val Leu Leu Leu Val Ile
50 55 60

Leu Leu Ser Tyr Val Gly Thr Leu Gln Lys Val Tyr Phe Lys Ser Asn

70

75

80

Gly Ser Glu Pro Leu Val Thr Asp Gly Glu Ile Gln Gly Ser Asp Val

His Pro Asp Gln His Val Pro Ala Trp Thr Thr Asp Ala Ser Leu Pro
115 120 125

Gly Asp Gln Ser His Arg Asn Thr Ser Ala Cys Met Asn Ile Thr His

130 135 140

Ser Gln Cys Gln Met Leu Pro Tyr His Ala Thr Leu Thr Pro Leu Leu 145 150 155 160

Ser Val Val Arg Asn Met Glu Met Glu Lys Phe Leu Lys Phe Phe Thr

165 170 175

Tyr Leu His Arg Leu Ser Cys Tyr Gln His Ile Met Leu Phe Gly Cys
180 185 190

Thr Leu Ala Phe Pro Glu Cys Ile Ile Asp Gly Asp Asp Ser His Gly
195 200 205

Leu Leu Pro Cys Arg Ser Phe Cys Glu Ala Ala Lys Glu Gly Cys Glu
210 215 220

Ser	Val	Leu	Gly	Met	Val	Asn	Tyr	Ser	Trp	Pro	Asp	Phe	Leu	Arg	Cys
225					230					235					240

Ser Gln Phe Arg Asn Gln Thr Glu Ser Ser Asn Val Ser Arg Ile Cys 245 250 255

Phe Ser Pro Gln Glu Asn Gly Lys Gln Leu Leu Cys Gly Arg Gly
260 265 270

Glu Asn Phe Leu Cys Ala Ser Gly Ile Cys Ile Pro Gly Lys Leu Gln
275 280 285

Cys Asn Gly Tyr Asn Asp Cys Asp Asp Trp Ser Asp Glu Ala His Cys
290 295 300

Asn Cys Ser Glu Asn Leu Phe His Cys His Thr Gly Lys Cys Leu Asn 305 310 315 320

Tyr Ser Leu Val Cys Asp Gly Tyr Asp Asp Cys Gly Asp Leu Ser Asp
325
330
335

Glu Gln Asn Cys Asp Cys Asn Pro Thr Thr Glu His Arg Cys Gly Asp

340

350

Gly Arg Cys Ile Ala Met Glu Trp Val Cys Asp Gly Asp His Asp Cys
355 360 365

Val Asp Lys Ser Asp Glu Val Asn Cys Ser Cys His Ser Gln Gly Leu 370 375 380

Val Glu Cys Arg Asn Gly Gln Cys Ile Pro Ser Thr Phe Gln Cys Asp
385 390 395 400

Gly Asp Glu Asp Cys Lys Asp Gly Ser Asp Glu Glu Asn Cys Ser Val
405 410 415

Ile Gln Thr Ser Cys Gln Glu Gly Asp Gln Arg Cys Leu Tyr Asn Pro
420 425 430

Cys Leu Asp Ser Cys Gly Gly Ser Ser Leu Cys Asp Pro Asn Asn Ser
435
440
445

Leu Asn Asn Cys Ser Gln Cys Glu Pro Ile Thr Leu Glu Leu Cys Met
450 455 460

Asn Leu Pro Tyr Asn Ser Thr Ser Tyr Pro Asn Tyr Phe Gly His Arg
465 470 475 480

Thr Gln Lys Glu Ala Ser Ile Ser Trp Glu Ser Ser Leu Phe Pro Ala
485 490 495

Leu Val Gln Thr Asn Cys Tyr Lys Tyr Leu Met Phe Phe Ser Cys Thr

			500					505					510		
Ile	Leu	Val 515	Pro	Lys	Cys	Asp	Val 520	Asn	Thr	Gly	Glu	Arg 525	Ile	Pro	Pro
Cys	Arg 530	Ala	Leu	Cys	Glu	His 535	Ser	Lys	Glu	Arg	Cys 540	Glu	Ser	Val	Leu
Gly 545	Ile	Val	Gly	Leu	Gln 550	Trp	Pro	Glu	Asp	Thr 555	Asp	Cys	Ser	Gln	Phe 560
Pro	Glu	Glu	Asn	Ser 565	Asp	Asn	Gln	Thr	Cys 570	Leu	Met	Pro	Asp	Glu 575	Tyr
Val	Glu	Glu	Cys 580	Ser	Pro	Ser	His	Phe 585	Lys	Cys	Arg	Ser	G1y 590	Gln	Cys
Val	Leu	Ala 595	Ser	Arg	Arg	Cys	Asp 600	Gly	Gln	Ala	Asp	Cys 605	Asp	Asp	Asp
Ser	Asp 610	Glu	Glu	Asn	Cys	Gly 615	Cys	Lys	Glu	Arg	Asp 620	Leu	Trp	Glu	Cys

Pro Ser Asn Lys Gln Cys Leu Lys His Thr Val Ile Cys Asp Gly Phe

Pro	Asp	Cys	Pro	Asp	Tyr	Met	Asp	Glu	Lys	Asn	Cys	Ser	Phe	Cys	G1n
				645					650					655	

Asp Asp Glu Leu Glu Cys Ala Asn His Ala Cys Val Ser Arg Asp Leu
660 665 670

Trp Cys Asp Gly Glu Ala Asp Cys Ser Asp Ser Ser Asp Glu Trp Asp
675 680 685

Cys Val Thr Leu Ser Ile Asn Val Asn Ser Ser Ser Phe Leu Met Val
690 695 700

His Arg Ala Ala Thr Glu His His Val Cys Ala Asp Gly Trp Gln Glu
705 710 715 720

Ile Leu Ser Gln Leu Ala Cys Lys Gln Met Gly Leu Gly Glu Pro Ser
725 730 735

Val Thr Lys Leu Ile Gln Glu Gln Glu Lys Glu Pro Arg Trp Leu Thr
740 745 750

Leu His Ser Asn Trp Glu Ser Leu Asn Gly Thr Thr Leu His Glu Leu
755 760 765

Leu Val Asn Gly Gln Ser Cys Glu Ser Arg Ser Lys Ile Ser Leu Leu
770 780

Cys	Thr	Lys	Gln	Asp	Cys	Gly	Arg	Arg	Pro	Ala	Ala	Arg	Met	Asn	Lys
785					790					795					800

Arg Ile Leu Gly Gly Arg Thr Ser Arg Pro Gly Arg Trp Pro Trp Gln
805 810 815

Cys Ser Leu Gln Ser Glu Pro Ser Gly His Ile Cys Gly Cys Val Leu 820 825 830

Ile Ala Lys Lys Trp Val Leu Thr Val Ala His Cys Phe Glu Gly Arg
835 840 845

Glu Asn Ala Ala Val Trp Lys Val Val Leu Gly Ile Asn Asn Leu Asp
850 855 860

His Pro Ser Val Phe Met Gln Thr Arg Phe Val Lys Thr Ile Ile Leu 865 870 875 880

His Pro Arg Tyr Ser Arg Ala Val Val Asp Tyr Asp Ile Ser Ile Val
885 890 895

Glu Leu Ser Glu Asp Ile Ser Glu Thr Gly Tyr Val Arg Pro Val Cys
900 905 910

Leu Pro Asn Pro Glu Gln Trp Leu Glu Pro Asp Thr Tyr Cys Tyr Ile

915 920 925

Thr Gly Trp Gly His Met Gly Asn Lys Met Pro Phe Lys Leu Gln Glu
930 935 940

Gly Glu Val Arg Ile Ile Ser Leu Glu His Cys Gln Ser Tyr Phe Asp 945 950 955 960

Met Lys Thr Ile Thr Thr Arg Met Ile Cys Ala Gly Tyr Glu Ser Gly
965 970 975

Thr Val Asp Ser Cys Met Gly Asp Ser Gly Gly Pro Leu Val Cys Glu 980 985 990

Lys Pro Gly Gly Arg Trp Thr Leu Phe Gly Leu Thr Ser Trp Gly Ser
995 1000 1005

Val Cys Phe Ser Lys Val Leu Gly Pro Gly Val Tyr Ser Asn Val Ser

1010 1015 1020

Tyr Phe Val Glu Trp Ile Lys Arg Gln Ile Tyr Ile Gln Thr Phe Leu
1025 1030 1035 1040

Leu Asn

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⟨211⟩ 26

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26

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acggaatgat gt

⟨210⟩ 7

<211> 26

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gtccatcttc tctctgagac tctggt

26

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accagagtct ca

⟨210⟩ 9

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acgatcgaca gt